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Polperro, September 1, 1840.

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It is well known that various opinions have prevailed as to the nature of *Entophyta*, and that M. Unger has lately paid much attention to the subject, and has arrived at the conclusion satisfactory to himself, but not equally so to all mycologists, that they are mere exanthemata analogous to cutaneous eruptions in mammalia. M. Lèveillé, however, not contented with this notion, has examined them still more recently, and has discovered that in those species in which the cuticle of the matrix is most easily removed, there is immediately beneath it a true mycelium, from which the fungus is ultimately developed: and Corda, who has given most beautiful figures, though he appears not to have paid particular attention to the more early stages of growth, has shown that this mycelium penetrates the cells and interstices which are beneath the sori. This we have ourselves observed in *Æcidium Euphorbiæ*, the only species we have at present examined. Lèveillé has also shown that this structure prevails

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*Linnaea, ein Journal für die Botanik, &c.* Vol. XIII. Part 3—6.

[Continued from vol. iv. p. 46.]

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## PART VI.

On the family of *Piperaceæ*; by C. Kunth.

## PROCEEDINGS OF LEARNED SOCIETIES.

## BOTANICAL SOCIETY OF LONDON.

March 20.—Daniel Cooper, Esq., Curator, in the Chair.

A paper was read by Dr. W. H. Willshire, "On the nature of some of the lowest Organized Beings." The intention of the paper was to bring before the Society the views lately advanced by Ehrenberg, in his great work concerning the organization and relative place in the scale of animated nature of many of the tribe *Bacillaria*, *Closterina*, &c. It was endeavoured to be proved that a great many members of the family *Bacillaria*, the genus *Closterina*, and several others, must be considered as of a vegetable nature, and not of an animal, as Ehrenberg supposes, and that it is a matter of some doubt how far the members ranking under his sub-division *Naviculacea* may be considered as of an animal organization either. It was shown by Dr. Willshire that the phænomenon of self-division is not peculiar to the animal kingdom, but that it likewise occurs in that of the vegetable; that the whorled ramuli of *Chara* can increase both by transverse and longitudinal self-division; that the formation of spores in *Marchantia*, *Jungermannia*, and some other plants, takes place from self-division of the original cellule; and that the increase of *Conferva glomerata*, &c. is also known to ensue by the same means; and that therefore the mere fact of this mode of propagation in such structures as *Diatoma*, *Fragillaria*, *Desmidium* and others, is not a sufficient proof of their animal condition. It was stated likewise that granular matter, seen within many of these lower beings, and which is regarded by Ehrenberg in many cases as the ova granules or eggs of these creatures, cannot be such; for according to other observers, they become *blue* on the addition of the tincture of iodine, a further proof of their vegetable nature, and a fact particularly noticed by

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## BOTANICAL SOCIETY OF LONDON.

March 20.—Daniel Cooper, Esq., Curator, in the Chair.

A paper was read by Dr. W. H. Willshire, "On the nature of some of the lowest Organized Beings." The intention of the paper was to bring before the Society the views lately advanced by Ehrenberg, in his great work concerning the organization and relative place in the scale of animated nature of many of the tribe *Bacillaria*, *Closterina*, &c. It was endeavoured to be proved that a great many members of the family *Bacillaria*, the genus *Closterina*, and several others, must be considered as of a vegetable nature, and not of an animal, as Ehrenberg supposes, and that it is a matter of some doubt how far the members ranking under his sub-division *Naviculacea* may be considered as of an animal organization either. It was shown by Dr. Willshire that the phænomenon of self-division is not peculiar to the animal kingdom, but that it likewise occurs in that of the vegetable; that the whorled ramuli of *Chara* can increase both by transverse and longitudinal self-division; that the formation of spores in *Marchantia*, *Jungermannia*, and some other plants, takes place from self-division of the original cellule; and that the increase of *Conferva glomerata*, &c. is also known to ensue by the same means; and that therefore the mere fact of this mode of propagation in such structures as *Diatoma*, *Fragillaria*, *Desmidium* and others, is not a sufficient proof of their animal condition. It was stated likewise that granular matter, seen within many of these lower beings, and which is regarded by Ehrenberg in many cases as the ova granules or eggs of these creatures, cannot be such; for according to other observers, they become *blue* on the addition of the tincture of iodine, a further proof of their vegetable nature, and a fact particularly noticed by